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Legislative  
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de l'Ontario

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## Official Report of Debates (Hansard)

P-17

## Journal des débats (Hansard)

P-17

### Standing Committee on Public Accounts

2016 Annual Report,  
Auditor General:

Ministry of Health  
and Long-Term Care

2<sup>nd</sup> Session  
41<sup>st</sup> Parliament

Wednesday 22 November 2017

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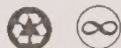
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# CONTENTS

Wednesday 22 November 2017

2016 Annual Report, Auditor General.....	P-249
Ministry of Health and Long-Term Care .....	P-249
Dr. Bob Bell	
Ms. Lorelle Taylor	
Ms. Roselle Martino	
Ms. Karen Hay	





## LEGISLATIVE ASSEMBLY OF ONTARIO

## ASSEMBLÉE LÉGISLATIVE DE L'ONTARIO

STANDING COMMITTEE ON  
PUBLIC ACCOUNTSCOMITÉ PERMANENT DES  
COMPTES PUBLICS

Wednesday 22 November 2017

Mercredi 22 novembre 2017

*The committee met at 1235 in room 151, following a closed session.*

2016 ANNUAL REPORT,  
AUDITOR GENERAL  
MINISTRY OF HEALTH  
AND LONG-TERM CARE

Consideration of section 1.04, immunization.

**The Chair (Mr. Ernie Hardeman):** I call the Standing Committee on Public Accounts to order. We're here this afternoon to hear delegations on section 1.04 of the 2016 Annual Report of the Office of the Auditor General of Ontario. We have our deputy minister here, and his able assistant.

We'll start off by having a 20-minute presentation—up to 20 minutes—from the delegation. At that time, we will have a rotation of 20 minutes for each party to ask questions, starting with the third party for one round of 20 minutes, and then before we start the second round, we'll divide the time equally between the three parties of what's left to get us from where we are to 2:45. With that, we'll turn the floor over to you, Mr. Deputy, for your presentation.

**Dr. Bob Bell:** Thank you, Chair. My name is Bob Bell. I'm Deputy Minister of Health and Long-Term Care. We appreciate the opportunity to address the standing committee with regard to the report on the publicly funded immunization program. I'm joined today by Roselle Martino, assistant deputy minister, population and public health division; as well as by Lorelle Taylor, associate deputy minister for health system information management and chief information officer.

First, some background on Ontario's immunization program:

Immunization is, of course, one of the most cost-effective health interventions. Through our provincial, publicly funded immunization program, we currently fund 23 different vaccines protecting against 17 diseases, including the free flu vaccine which is available through a variety of providers to Ontarians six months of age and older.

In December 2015, the ministry released Immunization 2020: Modernizing Ontario's Publicly Funded Immunization Program, a five-year road map to a high-performing, integrated immunization system. It included 20 priorities that require collective action and commit-

ment. The strategy's foundations were developed based on the findings of the Advisory Committee for Ontario's Immunization System Review and also reflects recommendations that were made in the Auditor General's report. Since the launch of that strategy, the ministry continues to implement many important initiatives to improve uptake of vaccines, reduce risks of disease outbreak and achieve better health for all Ontarians.

The Auditor General's 2014 annual report, which we very much appreciated, laid out 11 primary recommendations and a total of 24 specific recommendations. The ministry has taken concrete action and has fully implemented many of the specific recommendations from the Auditor General, which I'm pleased to note was acknowledged in the Auditor General's 2016 annual report.

I'm now pleased to provide you with more specific details on the work accomplished and under way that addresses the specific recommendations of the audit.

**Recommendation 1:** The Auditor General recommended that the ministry take action to review the immunization program delivery structure, including total funding and allocation of funding to public health units. This presented an important input into the development of Immunization 2020 actions, which are being implemented over five years.

Beginning in 2015, the ministry implemented a new public health funding formula which has improved the accountability and transparency of provincial public health funding; aligned public health funding with other ministry funding approaches; and supported a more equitable approach to public health funding. We'll continue to make adjustments in support of equitable funding approaches. In 2015, we also implemented new reporting requirements for public health units in order to obtain further details on local level spending related to the immunization program.

1240

As part of the modernization of Ontario public health standards, the ministry has developed a new public health accountability framework which articulates the ministry's expectations for the boards of health to promote a transparent accountability relationship with respect to its reporting of expenses related to immunization.

**Recommendation 2** was related to Ontario's provincial immunization repository, known as Panorama, including two sub-recommendations for the ministry to develop processes to enable health care providers to electronically update Panorama each time they provide a vaccine and to



determine if Panorama's outbreak and investigation components would be beneficial for Ontario after reviewing the costs and benefits of the system.

As part of the Immunization 2020 road map, the ministry is advancing the vision of a provincial immunization registry where all immunizations are recorded and tracked. A number of activities have been undertaken to advance this vision:

The implementation of Panorama and a data analysis tool, known as PEAR, have enabled Public Health Ontario to assess the completeness and accuracy of immunization records. In June 2017, Public Health Ontario released the first provincial immunization coverage report since we adopted Panorama.

The Immunization Connect Ontario—ICON—program was launched as a pilot in October 2016 and is now offered by 23 public health units. ICON provides a simple, secure mechanism for parents to view and eventually update immunization records online anywhere using their cellphone.

In March 2016, a batch immunization upload tool, named PHIX, was implemented to enable health units to upload batch data from physician electronic medical records or other sources, such as ICON, without requiring manual entry per record. This tool is now utilized by 30 health units. And we're pleased to inform you that we expect to have all 36 Ontario health units using these tools by April 2018.

The ministry is currently conducting an environmental scan as well as reviewing lessons learned from other jurisdictions that have implemented Panorama components to determine a plan forward for conducting infectious disease surveillance and managing related outbreaks in an effective and efficient manner.

Coming next, we're looking at ways to enable health care providers to submit and look up immunization records through a version of ICON, through direct integration into their EMRs, as well as the provincial immunization repository. Regulatory amendments are planned to the Immunization of School Pupils Act to require health care providers to report designated vaccinations to public health units. We expect those regulatory amendments to come into force next year.

The third recommendation of the auditor related to the importance of achieving high immunization coverage rates to help prevent outbreaks and better protect Ontarians. Through recommendation number 3, the Auditor General advised the ministry to establish targeted provincial immunization rates for all vaccinations. Through several initiatives under Immunization 2020, the ministry is working to increase vaccine coverage. Ontario is one of the few jurisdictions in Canada that requires children attending school and licensed child care settings to be immunized against particular diseases. The ministry, in collaboration with Public Health Ontario and the local public health units, has developed coordinated communication campaigns and educational materials to increase knowledge and awareness and promote immunization.

With the recent release of the national vaccination coverage goals and vaccine preventable disease reduction

targets by the Public Health Agency of Canada, the ministry is now assessing the alignment and applicability of these targets for Ontario to adopt. The ministry, in conjunction with Public Health Ontario and in close collaboration with our public health unit partners, will continue to monitor coverage while assessing the pan-Canadian vaccination targets for applicability in this province.

Recommendation 4 includes four areas of advice with regard to better tracking of immunization coverage rates and addressing low coverage rates in Ontario.

Recommendation 4.1 was a recommendation that the ministry take action to harmonize immunization requirements between school and daycare centres. In response to this recommendation, the ministry, in close collaboration with the Ministry of Education, fully harmonized the vaccine exemption processes between the Immunization of School Pupils Act and the Child Care and Early Years Act. Through ongoing engagement with the Ministry of Education in the modernization of the Ontario Public Health Standards, our ministry is working to further align immunization requirements between these acts in order to better protect children in daycare centres and schools.

Recommendation 4.2 was that the ministry take action to ensure that parents who exempt their children for non-medical reasons are aware of risks and benefits of being immunized. We're pleased to report that this recommendation is complete. As committed to in Immunization 2020, the Immunization of School Pupils Act was amended to require parents who are considering not immunizing their children for non-medical reasons to participate in an educational session delivered by their local public health unit. This requirement came into force in September 2017. We continue to support health units in their implementation of this important requirement.

Recommendation 4.3 was the recommendation that the ministry ensure that public health units are identifying areas of low immunization coverage. Again, as part of Immunization 2020, we have taken action to support local boards of health in meeting their responsibilities under the Immunization of School Pupils Act, and to maintain a consistent standard for vaccine-preventable diseases throughout the province. The modernized public health standards, which have been developed in close consultation with public health units, will boost local efforts in promoting and providing immunization programs to underserved areas of the population, with the goal of achieving better health outcomes at the provincial and local levels.

Recommendation 4.4 was that the ministry publicly report immunization coverage rates by daycares and schools. Local boards of health collect immunization data from schools and daycares, which they use to assess immunization status, provide education and respond to vaccine-preventable disease outbreaks. In May 2017, Public Health Ontario released the first immunization coverage report, derived from data extracted from Panorama. This is the first time that immunization coverage estimates by public health units were made



publicly available. As mentioned before, the modernized standards will require units to identify and address areas with low coverage rates as part of their population health assessments.

Recommendation 5 was that the ministry, in conjunction with provincial and federal partners, explore the possibility of providing immigrants the opportunity to receive vaccinations before arriving in Ontario, including providing information on immunization to new immigrants. The ministry agrees with this important recommendation and remains committed to provide new immigrants with the best information, tools and supports. An excellent example of this commitment was working closely with federal partners to implement a comprehensive immunization strategy supporting the resettlement of Syrian refugees in Ontario. The ministry has started conversations with the provincial Ministries of Citizenship and Immigration and International Trade to find opportunities to provide resources to immigrants before arriving in Ontario.

Recommendation 6 included three areas of advice with respect to the promotion of immunization.

In recommendation 6.1, the Auditor General recommended that the ministry take action to ensure that physicians have easy access to immunization information and materials. This recommendation is fully implemented.

#### 1250

The Auditor General recommended the ministry determine whether bonus payments to physicians are resulting in improved immunization rates in a cost-effective manner. This is currently under discussion during negotiations with the Ontario Medical Association.

Recommendation 6.3 was that the ministry help reduce duplication of efforts by public health units locally by considering a more coordinated approach to public education about vaccines to address vaccine hesitancy. The ministry, in close collaboration with Public Health Ontario, has developed communication materials for health providers to use when providing immunization information and has amended the Immunization of School Pupils Act to help parents make an informed decision about their child's health by providing education on the risks and benefits of immunization, as well as the risks of not having their children immunized.

Recommendation 7 was that the ministry implement a consistent process for the costs and benefits of vaccines recommended by Canada's National Advisory Committee on Immunization. The ministry implemented a modernized vaccine review process that includes cost-effectiveness analysis to improve transparency, timeliness and comprehensiveness. Following this assessment in the NACI mandate, the ministry can implement a formalized process in the province, as recommended by the Auditor General.

Recommendation 8: The Auditor General recommended that we consider implementing a vaccine or mask policy to reduce the transmission of influenza in hospitals from health care workers to hospitalized patients. In 2015, I chaired an executive steering commit-

tee convened to provide advice to the minister on strategies to increase health care worker influenza immunization rates. We're committed to an ongoing process of monitoring and evaluating available research to protect vulnerable patients against the risk of influenza. Based on the current available evidence to this point, the ministry will not be developing legislation to require a vaccine or mask policy.

Recommendation 9 was related to the Universal Influenza Immunization Program, including three sub-recommendations, first that we assess the reasonableness of the rate paid to pharmacists to administer the influenza vaccine. This recommendation is fully implemented.

Recommendation 9.2: That we review and revise our claims payment systems to reject billings from health care providers for patients who have already received their influenza vaccine. However, in some cases, individuals may require two doses of influenza vaccine. This recommendation will not be implemented, and we found that it would apply to relatively few Ontario patients.

Recommendation 9.3 recommended that we periodically compare payments made to physicians for administering the influenza vaccine to those made by pharmacists, and follow up on duplicate payments. This recommendation will not be implemented as per the wording in the original recommendation. The system collecting billing information in OHIP and the system collecting pharmacy information are separate systems that are not linked electronically. The ministry's data suggest that this is a very minor issue, as only 0.6% of claims in the billing system seem to have any evidence of irregularity.

Recommendation 10 related to vaccine safety, specifically to adverse events regarding immunization.

Recommendation 10.1: The ministry should require health care providers to give patients standardized information about adverse events which should be reported. This has been completed.

Recommendation 10.2: That we should collect information on health care providers who have administered vaccines associated with adverse events. We're currently considering revisions to the Health Protection and Promotion Act. This action is being assessed as part of these revisions.

Recommendation 10.3: That we take action to follow up on any unusual trends, including areas where adverse events look unusually low or high. In November 2016, Public Health Ontario published public health unit-specific adverse events reporting rates for the first time.

Recommendation 11 is related to vaccine wastage, including four recommendations:

- ensuring the volume of vaccines ordered by and distributed to health care providers is reasonable;

- revising the minimum standards for the types of fridges and thermometers used by health care providers in the storing of vaccine;

- obtaining and reviewing on information on vaccine wastage by each health care provider; and



—considering implementation of a risk-based approach for the inspection of offices by health units.

The ministry's comprehensive cold chain inspection process is unique in Canada. As part of this process, public health units assess and promote compliance with vaccine storage and handling requirements; educate to increase awareness; and inspect health service providers' facilities to determine that appropriate vaccine storage and handling practices are being followed.

Under Immunization 2020, we have committed to maintaining the optimal vaccine supply through reviewing Ontario's cold chain inspection process and exploring opportunities to further reduce potential vaccine wastage, which is now tracked through inventory management in the Panorama system.

In closing, I trust this update has provided you with the confidence that the ministry has acted on the Auditor General's recommendations and, indeed, embraced these recommendations. We're confident that the ministry and its partners will continue to build on the Auditor General's recommendations to strengthen the effectiveness and efficiency of our immunization system.

**The Chair (Mr. Ernie Hardeman):** Thank you very much for your presentation. We will now start the first round of questions and comments. Ms. Gélinas?

**M<sup>me</sup> France Gélinas:** So that I use my time wisely, how long do I have for the first round?

**The Chair (Mr. Ernie Hardeman):** The which?

**M<sup>me</sup> France Gélinas:** How long do I have?

**The Chair (Mr. Ernie Hardeman):** You have 20 minutes in this round.

**M<sup>me</sup> France Gélinas:** Okay. Maybe I would start, Deputy, at the 10,000-foot level. If you could explain to us the different parts of Panorama that exist, that are fully rolled out, that work, that are in process and that kind of stuff, it would help decrease a whole bunch of other questions.

**Dr. Bob Bell:** Super. I'm going to start off at the 30,000-foot level and then hand it over to my colleague, Lorelle Taylor, at probably the 10,000-foot and any lower level that you'd like to discuss.

There are two elements of Panorama that are implemented: the vaccination repository and inventory management components of Panorama. Over to you, Lorelle.

**Ms. Lorelle Taylor:** I assume, Mr. Chair, I don't have to introduce myself each time.

**The Chair (Mr. Ernie Hardeman):** Yes.

**Ms. Lorelle Taylor:** Thank you. In the Panorama product itself, there are five modules. There is an immunization module, there's an inventory management module, there's a family health team module—which other provinces needed but Ontario did not—there's investigation, and there's outbreak management.

Ontario has implemented the first two modules that I described: immunization and vaccine inventory management. When I say that it has been implemented, it has been implemented in all 36 public health units today. It is running using the Panorama software, accessing what we call the immunization repository, which sits behind that

software. In that repository today, we have approximately 95 million standardized immunization records for approximately 6.6 million Ontarians. There is both demographic data in that repository as well as immunization information.

In the Panorama product itself, to make it successful for Ontario we had to look at at least two things. The first was that, in the first instance of the product when Ontario looked at it, it did not have all of the functionality necessary to support the public health units. So in the Ontario version of the product, we added functionality that would allow public health units to work with schools and to implement and support school suspensions, if required, and to contain any outbreaks in that regard.

The second thing that we had to look at was what we call ancillary or complementary tools that would work with the Panorama product. We have implemented a number of those that I can speak to. I'm happy to do so, but I'll stop there to start with.

1300

**M<sup>me</sup> France Gélinas:** Okay. So, two of the five. One was never intended to be implemented anyway. I want to focus on the repository for a little while. So 6.6 million Ontarians—we all know that there are more of us than 6.6 million. What happens to the rest of us?

**Ms. Lorelle Taylor:** The ultimate vision for the immunization repository—and I use the language "repository" with intent because, from a public health expert, which I do not personally profess to be, but from a public health expert perspective, a registry has very specific requirements. One of those requirements would be that it would be comprehensive for the population.

The ultimate vision is that all immunizations for all Ontarians will be in that repository. Today, we have a portion of that, the 6.6 million Ontarians I referred to, and the reason for that is that we started with school-aged children and focused on that to begin with. That is not the end point; it's the start. The repository has the capability to house adult population immunization records and actually does so because some public health units record immunization data for the adult population, and when they do, they use Panorama and they report it in that repository.

So we do not consider it to be 100% comprehensive, but following the Auditor General's recommendation, that is our goal: to continuous improvement to get a comprehensive content of the repository. But the accuracy and data quality of the information that is in there today is significantly improved from when there were legacy systems—36 different ones that were non-standardized.

**M<sup>me</sup> France Gélinas:** Okay. Who can input into the repository?

**Ms. Lorelle Taylor:** Today, the public health units are the primary—the nurses and clinicians in the public health units enter the data. There are multiple ways of doing so. Maybe I'll speak to that for a moment, and then I'll come back to getting broader information into the repository.



Today, the clinicians and the public health nurses who are running, for example, the school clinics, use—when I talked about the complementary tools to Panorama, the ministry also provided over the last two years iPads for the nurses who go into the schools to immunize students in the school population. We provided software that sits on those iPads so that in disconnected mode—in some of the schools in remote areas, it's difficult to connect to the repository from network connections, so they do it in disconnected mode, and when they get back to the public health unit, they actually upload that data into the repository.

Having said that, with the longer-term vision that I described of wanting more comprehensive information and wanting it in a timely way, the second complementary tool that we've developed is called PHIX; Bob mentioned it in his introductory comments. What it is is really a tool that accepts immunization data from a number of different sources in batch mode. It allows the expert clinicians in the public health unit to validate that indeed these immunization records are valid immunizations and for the right, in many cases, students. I call it sometimes a staging area. And then once the clinicians are comfortable with that data, it is inputted into the repository in an automated way.

**M<sup>me</sup> France Gélinas:** Okay. Are all of our interdisciplinary teams able to use batch mode transmission of immunization records?

**Ms. Lorelle Taylor:** It's not 100% coverage throughout the province today, but a number of public health units who work very closely with their family health teams—the northwest public health unit is a primary example—get regular spreadsheets from the family health teams, and through the PHIX tool that I talked about, those immunizations now go into the repository. At the time of the audit, that PHIX tool was not in place and so therefore some of those immunizations from family health teams, for example, were not being loaded into the repository. But that's progress that has been made, and that Bob spoke to, since the audit.

**M<sup>me</sup> France Gélinas:** If I look at individual physicians, not in family health teams or other interdisciplinary teams, are any of them able to send their immunization records to Panorama in one way or another?

**Ms. Lorelle Taylor:** The capability exists. I should just check with the team—

**Ms. Lorelle Taylor:** So, yes.

**M<sup>me</sup> France Gélinas:** Are they doing it?

**Ms. Lorelle Taylor:** In some cases, they are. They are not in all cases across the province yet.

**M<sup>me</sup> France Gélinas:** Are they in batches when they come in from primary care physicians, or is it that the minute he enters it into his EMR, it goes in?

**Ms. Lorelle Taylor:** No, we do not have real-time from the EMRs into the immunization repository, but I'd be happy to speak to the work that we are doing for that to happen. What I just described, in many ways, we see as interim measures, pending full integration between

EMRs and the repository. Would you like me to speak about the work on EMRs?

**M<sup>me</sup> France Gélinas:** Why not?

**Dr. Bob Bell:** Maybe I could just mention, because I know Madame Gélinas's interests, that that would include nurse-practitioner-led clinics. They can have that batch upload.

**Ms. Lorelle Taylor:** Okay. Thank you, Bob.

In order to get full integration in real time, as you described, Madame Gélinas, from electronic medical records into the immunization repository, two things have to happen. First of all, the immunization repository has to be set up so that it's modern and can accept the transactions from the EMRs, and has the interfaces. That has been done. It's ready to go.

What also has to happen is that the EMRs have to be made capable to send the data. We are dependent on the EMR product vendors in the province to do that. They're the ones who actually create the road maps for their EMR products. They work with physicians to build in functionality that's appropriate for nurse practitioners and physicians. As such, we have published the draft specifications.

Some of the EMR vendors are actually making their product modifications right now based on the draft, and—there is a very formal process—we're about two months away from formally publishing the final specification. Once that is published, then the EMR vendors are in a position to finalize changes that they would make to their product. They would have to make those changes to their product, and they would have to roll those changes out to the physicians who use their EMRs.

That's the dependency that we have on the EMR product suite in Ontario, but ultimately the interim measures that I described are for helping physicians, nurse practitioners and public health units today with interim tools.

**Dr. Bob Bell:** That's why it was important that the regulatory amendments to the Immunization of School Pupils Act requiring health care providers to report to public health units are what are obviously driving these changes in the electronic medical record vendor community. These will come into force next year.

**Ms. Lorelle Taylor:** We see that as a very important policy and regulatory change, which then will enable the technology work that I've described.

**M<sup>me</sup> France Gélinas:** So when the health units publicly reported in 2007 on their coverage report, that was the first time, I think you said, Deputy, that they reported—

**Dr. Bob Bell:** In 2017. Apologies.

**M<sup>me</sup> France Gélinas:** In 2017?

**Dr. Bob Bell:** Yes.

**M<sup>me</sup> France Gélinas:** Okay. So how confident are we that those reports are comprehensive, as in some immunization that was done had not yet been transferred into the repository?

**Ms. Lorelle Taylor:** As it relates to school-age children, the public health units have 100% accountability



for immunization data, and parents, under the ISPA today—until that new regulation, which I think is 645, comes into play, they will continue to be.

The content of the Panorama repository is much more comprehensive than it used to be, so the integrity of the data has significantly improved and, for the first time, as I think Bob may have mentioned—I don't believe it was publicly reported until June 2017 by PHU area exactly what the coverage rates were.

So there is more refinement at a sub-PHU region of the province, and there is improvement in the comprehensiveness and the quality of the data, but over time, the end state with Immunization 2020 goals based on the Auditor General's recommendations would be real-time feeds from the EMR products into the repository.

1310

**M<sup>me</sup> France Gélinas:** So we had the very first report in May 2017. How frequent can we expect those reports to be, and when is the next one coming?

**Ms. Roselle Martino:** Roselle Martino, assistant deputy minister of the population and public health division.

We are working with Public Health Ontario to make those reports annual, Madame Gélinas. As Lorelle said, it started with the health unit level. We do understand, and as the auditor had recommended, that they want to look at bringing it different levels down—so you have the health unit level, then looking at schools, then looking at daycares. We need to, obviously, be mindful of privacy concerns, small communities, those kinds of things. But we are definitely working with Public Health Ontario to make it annual, and then also going at different levels down.

**M<sup>me</sup> France Gélinas:** From what you're saying, I can expect to see another coverage report by the health unit in May 2018? How long before we would start to drill down below health unit level into schools and daycares? Let's start with schools.

**Ms. Roselle Martino:** We are in the midst of those discussions with Public Health Ontario, and we'll know the outcome of that discussion early in the new year.

**M<sup>me</sup> France Gélinas:** What's your gut feeling? Are we close? Are we talking months, years, decades?

**Ms. Roselle Martino:** I don't think it's decades, and I wouldn't say it's years. I would say maybe between months and years. Is that fair?

**M<sup>me</sup> France Gélinas:** Yes. Good enough.

How about we look at daycares? Are they both being handled at the same time, or one after the other?

**Ms. Roselle Martino:** They'll have to be looked at together. Obviously, they have the school piece. We are asking them to look at both schools and daycares. They may report first at the school level, for instance, and then go to daycares, given, again, how many students are in a daycare.

Why they're also looking at it comprehensively is, there is a requirement, again, based on—I didn't say this, but thank you very much, Auditor General, for your

recommendations and the work with your team on this report and the subsequent reports.

We are also looking at—there's a requirement for the daycares and licensed child care centres to submit the immunization records to the medical officer of health, and in turn for the medical officer of health to also ensure that they have that for the licensed daycares in their health unit catchment area. Getting the data is obviously a key piece—and then in terms of rolling it up in aggregate for PHO.

**The Chair (Mr. Ernie Hardeman):** Four minutes.

**M<sup>me</sup> France Gélinas:** If I have four minutes, I'm going to start the recommendations in the order that they came in and skip all of the Panorama questions I had.

Thank you for the update.

On recommendation number 1, I understand that the funding to the 36 health units has changed—you say it's 2% additional funding to eight health units based on their socio-economic profile, which means that the other 28 did not. Basically, what's the plan—at which point would all of the health units benefit from a budget increase and not just the one identified?

**Ms. Roselle Martino:** It's really important to clarify that the funding formula for health units was only applied to the 2% increase. We had a 2% increase for three years. In order to apply logic and be able to demonstrate good use of public funds, we applied the model only to the increment, because if we applied it to the base funding of health units, they would be cut, potentially, so we didn't want to do that.

What we are doing going forward is, now that we have the modernized standards and have enhanced accountability, we'll be looking at a flexible funding approach. The funding model that was used specifically to allocate the increment—we may not use that in its entirety; we may use elements of it in terms of the geography.

There are certain indicators that made sense. There was a north and south piece as well, etc.—use some of those indicators, but look at a more flexible funding approach now that we have the new modernized standards—

**Dr. Bob Bell:** Maybe I can just mention, with respect to the funding of public health units, that there has been a lot of work in modifying the provincial public health standards. A number of features which public health units were required to do that weren't necessarily in keeping with modern public health approaches have been changed. I think we've gone from—how many to how many, Roselle, in terms of the public health standards that are in the new, modernized approach?

**Ms. Roselle Martino:** Yes, we have reduced the programmatic requirements from 148 to 90. But a key feature of the accountability piece of the new standards is that we are now actually asking cost per program. Every health unit—what are their immunization program costs based on the standards, which is the requirement; and what programs they're delivering—what is the cost of those?



**M<sup>me</sup> France Gélinas:** Have you found out anything in this new way of doing business that could explain the wide range of expenses that the auditor mentioned, that some health unit did it at \$2 while the others were at \$12?

**Ms. Roselle Martino:** Madame, the new way of doing things comes into effect January 1, 2018. But we have been working with health units since the auditor's recommendation. We have been working over the past two years on this whole modernization process.

**The Chair (Mr. Ernie Hardeman):** We'll have to stop there. That concludes the time. We're now going to the government. Mr. Fraser.

**Mr. John Fraser:** Thank you very much, Chair. Just to follow up on that and what we were talking about—we were talking about variances in delivering programs. One of the things that I know about public health is that it's a provincially mandated program which we share with municipalities, I think 75-25, or in that area. If you take a look at the variance that you get, those are based on decisions that are made outside of this government. Is that a challenge in terms of when you're trying to take a look at how programs are delivered? Does that have an impact?

**Dr. Bob Bell:** Thanks for that, Mr. Fraser. The province is responsible for delivering funding for the programmatic approaches required to complete the public health standards. Local municipal boards of health are able to make their own decisions about what other activities are undertaken. Generally speaking, the funding is about 75% provincial and 25% local, but that's not mandated. Depending on the activity that is mandated by the local board of health, it could vary slightly from that.

**Mr. John Fraser:** So we would just look at those mandated programs, so any variance would exist in how they—

**Ms. Roselle Martino:** I would just add, in addition to what the deputy said, that the public health standards are what we call "mandatory programs." That's another name for them. We're trying to normalize it to just be "public health standards," but "mandatory programs" is what they are.

We also fund a number of programs outside of the mandatory programs. Healthy Smiles Ontario—to bring it up, Madame. Don't ask me any questions about that, Madame. You already got me in estimates.

**M<sup>me</sup> France Gélinas:** You're good.

**Ms. Roselle Martino:** Thank you. Healthy Smiles, Smoke-Free Ontario—we fund a lot of programs outside of that. In terms of the mandatory programs, the ministry does fund 75% of ministry-approved funding. It is the obligation of the boards of health to fund whatever the board of health submits as a budget.

**Mr. John Fraser:** Okay, that's great. I just wonder, so I can wrap my head around that challenge that's there for us—it's a partnership, right?

**Ms. Roselle Martino:** It's cost-sharing; yes, it's a partnership, absolutely.

**Mr. John Fraser:** So one of the things that we noticed—I think it was Public Health Ontario that came

out with a report that immunization coverage decreased, in the most recent report. Can you explain why that happened? Can I have some follow-up on that? What are your thoughts on that?

**Ms. Roselle Martino:** In terms of immunization coverage—sorry, Deputy. Did you want to—

**Dr. Bob Bell:** No, go ahead, please. You're the expert.

**Ms. Roselle Martino:** In terms of immunization coverage decreasing, obviously we watch that very carefully. What we have done is—again, the auditor had asked us to try and ensure that we are doing everything we can to promote immunization coverage. Now, in addition to streamlined, centralized tools to support health units and front-line health care providers to promote the benefits of immunization, we also have a requirement in the new public health standards to promote, educate and target specific communities that might be under-immunized. So we're actively putting in tools and measures to ensure that there is a promotion of the risks of not immunizing and the benefits of immunizing. Then that will ultimately influence the coverage rate.

1320

**Mr. John Fraser:** This relates to when we get to herd immunity and that concept. I understand on a very basic level what that means is that we have a level of safety that ensures that we're immune, but I don't know the tolerance that exists inside there.

I know that when I take a look at the report that was given to us today about where the immunity level was and to understand how that's set—because there are challenges and, often, challenges meeting those targets. Obviously a lot of those challenges—I've looked at them—they're not what one would see as being big.

Do you understand where I'm going? I just need to understand that whole sense of herd immunity and what range it's in.

**Dr. Bob Bell:** Yes. Maybe I'll start off by simply saying that you've absolutely got the concept correct. That is, when a very high proportion—99% of the population—is immunized against infectious diseases, it's highly unlikely the disease has an opportunity to lodge in a community.

I think it's fair to say that where that point of herd immunity rests is partly dependent on the infectiousness of the particular agent. I bet Roselle is going to tell me where that immunization rate is that determines an adequate rate of herd immunity in a variety of diseases.

**Ms. Roselle Martino:** It's not a specific rate. The Public Health Agency of Canada produces vaccine coverage goals and vaccine-preventable disease reduction targets by 2025. They specify for each vaccination what would be an ideal vaccine coverage goal. The general practice is, if you achieve all these coverages as specified, then that will give you herd immunity.

**Mr. John Fraser:** So, in a number of cases, if we take a look at the PHO report—and I have another document here, which I think you probably have—we haven't actually met those goals yet. We heard this morning about the challenges around—it was interesting that it's



not just anti-vaxxers, although they may be influencers. That's a real challenge inside. So it's not the people who are out in the streets or going through social media saying, "This is bad," and some research that people tout as reasons not to vaccinate.

How do we actually get to ensure that the vaccinating hesitancy, which is people who are saying, "Actually, I'm not sure. I don't know, but I'm not sure. And until I'm sure"—when I look at that, it doesn't have to be a lot of people to impact herd immunity.

The other question that I have is: How does not achieving those goals, and I hope I'm not getting too technical here, but what does one or two points mean—because it seems that's the magnitude of the thing that you're trying to change.

**Dr. Bob Bell:** Yes, you're absolutely right. We've seen examples in the last year of measles outbreaks. There's no question that achieving herd immunity is an important goal for our health system.

The approach that we're taking relies on several different elements. The first is to be able to assure Ontarians that we are collecting information on adverse events and publishing that information and describing it. There can be a fair amount of disinformation out there about adverse events. You've all heard stories about people having bad responses to various vaccinations. Having a reliable source of information published regularly by Public Health Ontario, we think is the starting point to say, "Here are all the adverse events that have occurred across our public health units." It has the advantage of approaching this that if there's a bad batch of vaccine, we're able to trace that through the—

**Ms. Lorelle Taylor:** Through the inventory module.

**Dr. Bob Bell:** Thank you. Through the inventory module of Panorama, we're able to trace those batches of vaccine. But it also assures Ontarians that we're collecting information and we're not seeing adverse events.

The other thing is to ensure that any parent—there are a few medical reasons: immunocompromised children shouldn't be vaccinated. There are a number of medical reasons why a child may not be appropriate for vaccination. But the usual reason that children aren't vaccinated in Ontario is that their parents choose not to vaccinate them, as you've suggested.

We think that the change that has already been instated, in September 2017, of insisting that a child's parent who has chosen not to vaccinate their child needs to go to mandatory education at public health units—we think that's an important step of getting around this vaccination hesitancy, both in being able to assure people that we're collecting adverse events and we're not seeing risks from the vaccines being provided in Ontario and, if you're not going to vaccinate your child, you need to understand, "Here's the very low risk attendant with providing vaccination and here's the high risk to your child." People don't tend to respond to the herd immunity argument; they want to know the risk to their child. "Here's the risk of having measles. Here's the risk of having mumps or rubella, should you not vaccinate your child against these common infectious diseases."

That's the approach that we're taking. It's an educational approach, as opposed to a more directive approach of saying, "You must, if your child is going to attend school."

**Mr. John Fraser:** Yes, and I think that's the approach that you have to take. One of the things that has been said very often is that, now that we've reached a certain level of immunity to all these things—measles killed 83,000 people in Canada in 1935. That's a lot of people. That's a fairly large town. That's not in our recent memory or history.

The thing that we can relate to most right now, if you want to say it was Ebola—which is something which is outside and different and not native to here, when people understood and were demanding vaccinations, or when we have a really serious flu strain that's out there. That's the thing that I think educates people the most, right?

**Dr. Bob Bell:** Well, you know, it's within the lifespan of current practitioners. When I was a GP from 1976 to 1979 in Brampton, we used to see patients with measles. It was a known diagnosis and you weren't surprised. In my practice, I probably saw three or four patients a year with measles. Inevitably they're patients who, of course, hadn't been immunized. So it was something that was predictable within most family practices in Ontario. It's dramatically changed now. It's an unusual occurrence worthy of a news report when an outbreak of measles occurs.

**Mr. John Fraser:** And towards what my colleague's question was, in terms of how we look at immunization rates that exist inside—we're probably away from schools and somewhere between—was it months and years?

**Ms. Roselle Martino:** Don't bring that up. I got away with that.

**Mr. John Fraser:** No, no. You know what? I know that you're working on it. But I guess the thing is, because you want to be able to—I guess the question is: Do you need to drive down that far, that fast, or do you really need—because you should be able to tell by the variance inside those numbers.

The variance in those numbers—it's pretty easy to spot when something is, "Okay, so here's your rate of immunization and this is what it is compared to everybody else." That variance is small. But you know you've got to look at that geographical area to say, "Okay, we've got a problem with that unit," or that that unit might have a problem, I should say.

I'm not so sure that the best tool is not to say, "Okay, we need to look at that public health unit by monitoring these numbers that we compare to every other public health unit." There's a challenge that exists inside there. Why is there, and where is it?

**Ms. Roselle Martino:** What I would say is that the first time Public Health Ontario did it by health unit, that was the first report we saw in 2017. It hadn't been done per health unit before. But what that also showed us—obviously, it showed us a number of things. It showed us about the variation across the province, and it also



showed us what the best practices are. You might look at it as saying, “What did somebody do wrong?” but there are a lot of really good practices that came out of that as well. We’re looking at those to try and help and use that across the province to see what those health units are doing that is being quite successful, especially in health units that might have a high proportion of unimmunized and they’re still getting good coverage rates. What are they doing that’s right?

1330

**Mr. John Fraser:** That’s a very good point.

**Ms. Roselle Martino:** The other thing I would just add: It’s not just one thing, which is what you alluded to as well. Immunization 2020 is part of our strategy. It’s multi-pronged, right? It’s not one thing that’s going to impact all of this. We have launched a coordinated immunization and communication strategy. We have enhanced vaccine safety communications and reporting. We provide immunization education in schools. So it’s a number of these specific activities that will help to improve the coverage.

**Dr. Bob Bell:** Maybe I could just mention as well, Mr. Fraser, that the other aspect of Immunization 2020 is the opportunity for case finding when an outbreak occurs. In the most recent measles outbreak in Niagara, we were able to go through the Panorama records of children in the school system, identify children who weren’t vaccinated and make sure that their parents had the opportunity to vaccinate them, as many did. Indeed, there were small clusters of unprotected children who were identified and who, in some cases, had been exposed to the measles virus, but we were able to vaccinate them in time to prevent them from getting sick, as they undoubtedly would have.

That presence of a repository that gives us case-finding information is very important, in addition to the herd immunity aspect that you’re wondering about.

**Mr. John Fraser:** I hope I’m not drilling down too far. It’s not estimates.

**Ms. Roselle Martino:** It’s like it.

**Mr. John Fraser:** It feels like it, eh?

**Ms. Roselle Martino:** It feels like it.

**Mr. John Fraser:** How much time do I have?

**The Chair (Mr. Ernie Hardeman):** You have about four minutes.

**Mr. John Fraser:** I have four minutes? Oh, great. Now I’ve lost track of where I was going.

**Dr. Bob Bell:** Oh, dear.

**Mr. John Fraser:** It’s okay. It’s not something uncommon.

Are there specific challenges that exist with vaccination rates with certain communities, whether that community be a community that has a certain cultural background or a community that has certain practices? Just so we know—

**Dr. Bob Bell:** Yes, absolutely. There are communities within the province where the cultural norm is not to vaccinate, no matter how much information is provided. Generally speaking, public health units have difficulty

with achieving good vaccination coverage within those communities. We certainly focused on those communities with the usual process—the description of the fact that this is safe, the description of the fact that getting these diseases is risky, and that you can absolutely protect your children with vaccination—but for a variety of cultural, perhaps, or religious reasons, parents decide that they will not vaccinate their children.

Part of the advantage of Panorama is that when something occurs, we can identify those children very quickly through the combination of their school records and their Panorama records, and we can offer the parents, at that point, a second chance to vaccinate their children in the face of a local outbreak.

**Mr. John Fraser:** I know that in the auditor’s report, there was identification of, I think, refugees and immigrants as a challenge to ensure that they’re vaccinated. I know there are sometimes challenges, for instance, with maternal health and the understanding in some communities that they should be going to a doctor or going to a doctor regularly or to a nurse practitioner over the course of their pregnancy, or issues around sexual health. Is that where we’re finding some challenge? I represent a community that’s exceptionally diverse and has a ton of new Canadians, and so that’s why I’m asking that question.

**Dr. Bob Bell:** I’ll start off, and perhaps Roselle has further information.

Some of it depends on the status that the individual is at the time of entry to Canada. If they’re a federally sponsored refugee, chances are that their access to health care will provide them with immunization and that their opportunity to get good information is not problematic. If they’re not a federally sponsored refugee, if they’re in the process of determining status and don’t have access to federal health coverage, that could be a problem.

Of course, we have community health centres which focus on access to health care for disadvantaged people, marginalized groups, and those centres would especially focus on the opportunity to provide vaccinations to the children of folks who might be disadvantaged in that way with access to health coverage because they haven’t qualified as recipients of federal health coverage.

**The Chair (Mr. Ernie Hardeman):** Mr. Yurek.

**Mr. Jeff Yurek:** Thanks for coming in today. Well, I guess you had no choice, but thanks for being here.

*Laughter.*

**Mr. Jeff Yurek:** Before I ask my questions, I’ll just note, since the important people are here other than Dr. Hoskins, that both the member for Oxford and myself do support an upcoming amendment to Bill 160 to merge the Elgin and Oxford health units. I’m hopeful that it does happen. Hopefully, you’re preparing to make that change for our areas.

**Dr. Bob Bell:** Thank you. Yes, it’s very rational.

**Mr. Jeff Yurek:** I’ll start with Panorama, which was spoken to earlier. It was mentioned that doctors don’t have real-time access to entering immunizations as they occur in their office. My understanding is that there was a



goal for it to have happened this summer. Do you have a date of when you think doctors will be able to enter Panorama data?

**Ms. Lorelle Taylor:** There are two methods that we are looking at for doctors to enter data. I can also speak about doctors viewing data. But with respect to your exact question, Mr. Yurek, about entering data, the first measure that will be in place—we're targeting March 2018—is what we call health care providers' ICON, which stands for Immunization Connect Ontario. It's a mechanism that is very similar to what we've done for Ontarians, but this is for clinicians—in particular, physicians and nurse practitioners and nurses—so that they can enter the immunization data through ICON. That will be available in March 2018.

**Mr. Jeff Yurek:** Would it be linked to the database in their office? Or will they have to go online and enter—

**Ms. Lorelle Taylor:** They would have to enter it into a separate window from their EMR. The longer-term goal is to have the information in their EMR, real-time, integrated into the repository. Referencing back to the questions that I answered before, what we're doing there is, first of all, publishing a specification. We've got it in draft form already. It has been provided to the vendors in the marketplace that have the most EMR products in Ontario. We are formalizing that specification as is required, and that will be ready within two months. From there, the product vendors can modify their EMR products in order to electronically send the data to the repository. That work is dependent on the readiness of the EMR products in Ontario. As soon as the various vendors modify their products, we will be able to receive that data real-time.

**Mr. Jeff Yurek:** How about pharmacies? They're the most technologically advanced health care profession. Their vendors turn over new programs overnight. I would imagine if you had offered this to pharmacies, within a couple of weeks' time pharmacies would be entering Panorama real-time data with their flu shots etc.

1340

**Ms. Lorelle Taylor:** I can speak to that as well. We do a lot of work with the pharmacy software vendors. There are roughly, I think, 13 pharmacy software vendors who have a presence in Ontario, and through work that we're doing on another initiative to implement and provide the best dispensed-medication information to clinicians—I won't go into the detail there—we automatically get feeds from the pharmacy systems into our health network system and into a repository that will house drug data, including immunizations. We are working closely with the pharmacy software vendors, because they are progressive, and we appreciate the fact that through the change in scope of practice a number of years ago, pharmacists are immunizing Ontarians.

**Mr. Jeff Yurek:** You also mentioned the modules in investigation and outbreak management that you haven't instituted yet. Is there a plan of action for bringing those online, or what is going on with those?

**Ms. Lorelle Taylor:** Two things on the investigation and outbreak management modules: Today in Ontario,

investigation and outbreak management is supported by a tool called iPHIS, the Integrated Public Health Information System. That tool is alive and working today; in fact, all of the technology infrastructure was recently upgraded to make sure that it was robust, modern and stable.

From the Auditor General's report in 2014, one of the things we really learned through the work with Susan and her team was that BC was encountering challenges with the implementation of the investigation and outbreak management modules. We decided at that time, in 2015, that we would do two things: We would look at the marketplace to see what tools had progressed since the concept of Panorama, which was really established in about 2004 at a pan-Canadian level. Secondly, we'd look at the experience of British Columbia and determine the lessons learned and what we should think about, and thirdly, we'd consider a business case.

That work, we anticipate—the environmental scan, the input from Ontario public health experts on this particular file, the experiences from BC and whether to proceed with a business case, because it will require a financial investment—will be in the spring of 2018. That's where we're targeting. In the meantime, the iPHIS solution will continue to be the tool used for investigation and outbreak management in Ontario.

**Mr. Jeff Yurek:** So if you go forward with these two modules, we're going to have to invest more money in Panorama?

**Ms. Lorelle Taylor:** We will have to invest more money in order to get a modern investigation and outbreak management tool, yes—in all likelihood, yes. I don't want to predetermine the conclusions from the analysis that will be done up to and including the spring, but if you were to ask me my best estimate, my best guess today, it will require a financial investment to implement a new province-wide investigation and outbreak management solution.

**Dr. Bob Bell:** Just briefly, I'll just mention that during the concern about Ebola, there was some stress-testing of the system, and it is effective. It does provide health units with a way of communicating regarding surveillance for infectious disease. So we do have a system in place currently that could be improved, but we do have a system in place.

**Mr. Jeff Yurek:** It's probably because I can't remember, or I don't know: Panorama overran its budget. Could we have a little more explanation on that?

**Ms. Lorelle Taylor:** Yes, I could speak to that. The Auditor General, in the report, cited the fact that when you look from the first concept of Panorama in 2003 up to, I'll say, March 31, 2016, there were a number of estimates along the way of what the project would cost. In fact, in Ontario in 2009, the project was halted and stopped.

In late 2010, with input from public health experts and the Walker report in 2006, which really said that in Ontario we need to invest in upgrading public health tools and infrastructure, there was an approval for the Ontario Panorama project. That's the project that landed



successfully the implementation that I described to Madame Gélinas, and that budget was set and approved at \$120 million approximately. The expenditures, up till March 31, 2016, were just over \$119 million. That included both one-time project investment and it also included sustainment costs because over that multi-year period the project was actually implementing and running, starting with six early adopters in the July 2014 time frame. So there were operational costs being incurred. That is included in the \$119-million figure that I just gave you.

The last point I'll make is that because of the success of the Ontario implementation, Canada Health Infoway has funded, as of March 31, 2016, \$27 million to the province which offsets the \$119 million that I referenced. The total number of spend—what I've spoken to explicitly—is the financial profile of the project from when it was approved in late 2010 to March 31, 2016.

The Auditor General did cite in the report that prior to that, \$44 million had been spent approximately. So if you look at that aggregate total, it was \$162 million for that delivery and \$27 million was funded by Canada Health Infoway, which is offsetting a portion of that total cost.

**Mr. Jeff Yurek:** So we're in year 7—from 2010 to now—of Panorama development. How much longer till it's meeting full operational needs? Are you saying that next spring it's going to be completed, not adding these extra schedules because you say you have other methods—

**Ms. Lorelle Taylor:** We consider the Panorama project, as of March 31, 2016, with the scope that was approved against the budget of \$120 million, complete. In addition to some of the tools that I've already described, we have developed those complementary tools to Panorama. Now we view that we are in continuous improvement and that we will continue to operate it and continue to make improvements on the comprehensiveness of the data, but it is functioning, it is operational, and that's for vaccine inventory management. That's for the automation of the forecaster which shows Ontarians and clinicians not only what immunizations your child has had, but also, importantly, the immunizations that your child may be scheduled to have.

**Mr. Jeff Yurek:** So is there going to be an ongoing Panorama line item in the budget or is it going to be as needs arise that you're going to apply it?

**Ms. Lorelle Taylor:** It is part of our IT budget. We did have expenditures from April 1, 2017, and onward. We had expenditures in the previous fiscal year to operate, run and do some of the additional complementary work that I described.

**Mr. Jeff Yurek:** Do you have a ballpark figure of what that will run year to year?

**Ms. Lorelle Taylor:** Yes. I can tell you the number—let me just make sure I give you the right number. I can tell you what was spent in the fiscal year.

**Dr. Bob Bell:** On both development of new tools and operations of the repository and inventory management.

**Mr. Jeff Yurek:** I feel like I'm in estimates.

**Dr. Bob Bell:** It never changes.

**Ms. Lorelle Taylor:** For the fiscal year 2016-17, ending March 31 of this year, it was just over \$14 million.

**Mr. Jeff Yurek:** Do you suppose it's going to be \$14 million a year, the figure, or do you have any idea?

**Ms. Lorelle Taylor:** I would say that for the operational costs—so as of what's in place and functioning today, there is a static, if you will, and consistent operational cost. Depending on the other investments that are determined, for example, the business case around investigation and outbreak management, we'll have to make considerations as part of the annual business process of what additional funding would be required.

**Mr. Jeff Yurek:** I just want to talk a bit about the flu vaccine distribution. Can you give us an overview of how you get this vaccine to doctors and pharmacies?

1350

**Ms. Roselle Martino:** Sure. The flu program—we start getting vaccine, I would say, in early September. It comes into the Ontario government pharmacy. We don't get the full allotment of flu vaccine all at once; it comes in in batches to us via Health Canada. Prior to the formal or official launch of the flu program, it gets distributed to high-risk populations, so long-term-care homes, hospitals. That goes out first, prior to the official launch. Then post the official launch, it is available to the general public.

How the distribution works is that for all health care providers that are not pharmacies, in the greater Toronto area, in the GTA, that is delivered directly to those primary care providers by the Ontario government pharmacy. Outside of the GTA, it is distributed by the local health unit, which has those relationships and partnerships with the health care providers in their various communities. I'll also contextualize it; it's also those health units that are doing the inspections of the fridges of those partners in their communities as well.

With respect to pharmacies, in the greater Toronto area it is distributed by the Ontario government pharmacy. Outside of the GTA, this is our second year of a pilot with a third-party distributor, where we actually use a distribution company that distributes for pharmacies. They pick up the allotment or shipment from the government pharmacy and then they distribute, with the rest of their pharmacy distributors, to pharmacies outside of the GTA.

**Mr. Jeff Yurek:** So the third-party distributor—are you using multiple distributors?

**Ms. Roselle Martino:** It's a partnership with CAPDM. They had—I'm sorry, what do the names mean? There are four, right?

**Ms. Tsui Scott:** CAPDM.

**Ms. Roselle Martino:** There are four distributors that are involved in that partnership. It's a pilot because in the first year, we had a few kinks to work out. We're going into the second year, but obviously, if we want to do that more comprehensively, we'd have to go to a competitive procurement process.



**Mr. Jeff Yurek:** Okay. I'm getting some calls that outside the GTA, doctors are having a hard time maintaining their stock that they're accessing. I'm also finding outside the GTA that certain pharmacies are having trouble getting their supply. Shoppers Drug Mart seems to be fine. I know they have their own wholesale distribution system, so they're probably one of the partners in that; but other pharmacies are having difficulty. I haven't heard anything in the GTA, so I'm assuming it's fine.

**Dr. Bob Bell:** I'd start off, Mr. Yurek, by saying that if you can give us information, we'll certainly follow up on that. We're delighted to do that.

**Mr. Jeff Yurek:** Okay.

**Dr. Bob Bell:** Roselle, do you have any information?

**Ms. Roselle Martino:** Yes. What I would say is that Ontario has procured approximately 4.6 million doses of flu vaccine for the 2017-18 flu season. The amount is very similar to previous years. To date, we have received almost all of our order, and we have distributed almost all of our order as well.

There's no overall shortage of flu vaccine in Ontario. When there's a peak in demand and the uptake exceeds the forecast, there might be temporary delays. That is very typical of any flu season. But as soon as we are notified of a shortage or an issue, the ministry and the health unit will respond as quickly as possible—like, right away.

We have been doing that. Whenever we received a call from a pharmacy or a primary care provider, we will immediately contact either the health unit or the third-party distributor to ensure that that shipment is gotten to them either that day or the very next day—as quickly as possible.

**Mr. Jeff Yurek:** Do you have numbers on how many of the 4.6 million doses will be distributed to pharmacies, based on last year's numbers? Or maybe just give me last year's numbers of total doses for pharmacies.

**Ms. Roselle Martino:** I don't have it at hand.

**Dr. Bob Bell:** We can find that, Mr. Yurek.

*Interjections.*

**Dr. Bob Bell:** There's a note coming forward.

**Mr. Jeff Yurek:** It is estimates.

**Ms. Roselle Martino:** Yes. We don't have the number. We'll have to get it for you. I don't have it.

**Mr. Jeff Yurek:** If you could, that would be handy. One minute?

**The Chair (Mr. Ernie Hardeman):** Yes.

**Mr. Jeff Yurek:** My daughter is very appreciative that you are allowing her to use the nasal flu vaccine. Last year she got stuck with the HPV at school and whatever else they gave her, and she missed her second dose of HPV because we went away. But they got her this year, so she was so thankful that she was able to get the nasal because she really, really hates needles. Please keep funding nasal vaccinations.

**Dr. Bob Bell:** I'll just say—

**The Chair (Mr. Ernie Hardeman):** Thank you. We'll go to the third party again: Ms. Gélinas.

**M<sup>me</sup> France Gélinas:** Go ahead, Deputy. Finish your point.

**Dr. Bob Bell:** I would just say how, as an oncologist, the option of the HPV nonavalent vaccine is such a fabulous thing. The whole history and the presentation of having that cancer in Ontario has changed dramatically over the last 10 years, from people who used to get the cancer because they smoked and drank to people who now get it because of HPV, and this is preventive. So it's a hugely progressive approach.

**The Chair (Mr. Ernie Hardeman):** Ms. Gélinas.

**M<sup>me</sup> France Gélinas:** I want to just follow up on two of the questions that were asked before. You said that the 13 pharmacy software vendors send their information to the medication repository, and not only for medications but also for vaccines. But does that connect with Panorama?

**Ms. Lorelle Taylor:** It doesn't connect with Panorama today, but we see that we have an opportunity to do that because both the drug repository that I spoke about and the immunization repository that I built use the same technology. I was trying to say that we work regularly with the pharmacy software vendors. Although we don't have that data in the repository today, we believe that that can be part of the road map going forward.

**M<sup>me</sup> France Gélinas:** Okay. All right. So all of those flu vaccines that the pharmacists have been giving are not in Panorama?

**Ms. Lorelle Taylor:** Correct.

**M<sup>me</sup> France Gélinas:** And the time frame?

**Ms. Lorelle Taylor:** Time frame—

**Dr. Bob Bell:** If I may, Lorelle?

**Ms. Lorelle Taylor:** Yes.

**Dr. Bob Bell:** With the huge number of opportunities we have to improve health care for Ontarians through digital health approaches, be they consumer- or provider-focused, I'm not sure that will be a priority for us. Lorelle's job is to determine the priorities in discussion with our clinical team, and that may not be. Is that fair to say?

**Ms. Lorelle Taylor:** Yes.

**M<sup>me</sup> France Gélinas:** Fair enough. My other question, in follow-up to what you told him, is that you mentioned that there is a \$14-million operating cost to run, I take it, Panorama. I'm curious to see—\$14 million seems like a lot of money. What is included in the operating costs that make up this \$14 million?

**Ms. Lorelle Taylor:** In the \$14 million that was spent last fiscal year, there are really two major component parts. One is the cost to operate. I don't have that number segmented out as I sit here, Madame Gélinas, but I can get that for you. The other costs that comprise that \$14 million would be new development work, so some of the tools that I talked about and the additions to improve the quality of the data and things like the fix tool that I talked about. If you would like a breakdown of those costs, we can get that for you. I just have the total with me today.

**M<sup>me</sup> France Gélinas:** I'll leave it up to the auditor to decide if this is useful for us or not.



**Ms. Lorelle Taylor:** Okay.

**M<sup>me</sup> France Gélinas:** I did recommendation number 1. Now I'm on recommendation number 2 from the Auditor General. When we talked about recommendation number 2, basically the cost and reliability concerns with the new information system—let me get my notes lined up properly here. Deputy, when you talked about this, you talked about a PEAR analysis tool, but Assistant Deputy, when you—no, I forgot your title.

**Ms. Lorelle Taylor:** It's okay. Lorelle.

**M<sup>me</sup> France Gélinas:** Lorelle, when you talked about it, you talked about this integrated public health info system being what we were using for outbreaks. What's the difference between the two?

1400

**Ms. Lorelle Taylor:** Would you like me to—

**Dr. Bob Bell:** No, no, please; you go ahead.

**Ms. Lorelle Taylor:** The PEAR tool is really a business intelligence and analytics tool. It's used primarily by Public Health Ontario. The types of reports that they run from PEAR—the PEAR analytics tool is going against the immunization repository. From that, that's where they produce the coverage reports that we've talked about today, and then ad hoc reports in their scientific capacity that they would run off of that PEAR tool. That PEAR tool is very much running analytical reports, scientific reports, off the repository.

**M<sup>me</sup> France Gélinas:** Do we use this for outbreak monitoring?

**Ms. Lorelle Taylor:** We don't use it today for outbreak monitoring, but what Public Health Ontario can use it for is looking at the trending of immunization patterns, things like that.

**Dr. Bob Bell:** And the outbreak surveillance is the iPHIS tool, a separate tool that's not Panorama. We're just not sure that the Panorama outbreak surveillance tool, based on BC's experience, is what we should adopt.

**M<sup>me</sup> France Gélinas:** That would be the one. The integrated public health info system that existed in all 33 health units even before Panorama started in 2004: So this is still what is being used for outbreak monitoring as we speak?

**Ms. Lorelle Taylor:** Correct.

**M<sup>me</sup> France Gélinas:** You've explained your work plan to make a decision as to which software you will use into the future. That answered my questions on that.

I'm still on recommendation number 2. You've mentioned, Deputy, ICON, where parents can view their own children's immunization. I've never seen this. Does it work, and how do you access it?

**Dr. Bob Bell:** Yes. I'll start off, and then Lorelle will explain the details. I think all of us, as parents, have had multiple yellow cards that we've lost and had to get re-filled out. This is a permanent record on your iPhone or on your home computer. It gives you access not only to the immunizations your kids have had but the future immunizations they need. It's obtained by the parent interacting with the public health unit to get a PIN which they can then use online to get access to their children's

immunization records, with appropriate authentication of their identity as being the parent of the child.

**M<sup>me</sup> France Gélinas:** Does it work right now in my health unit?

**Ms. Lorelle Taylor:** It works right now in 27 out of the 36 public health units. I will have to double-check if your health unit is one of them. We can find that out for you. It does work. We will say that it has had extensive Ontario parents' input, so a lot of the work that the team has done has been to do testing with parents to make sure that the way the information is displayed is clear, that it's easy to access. We're getting quite good feedback. We're continuing to roll that out and hoping that eventually, in all 36 public health units, the parents in those catchment areas can use it.

**M<sup>me</sup> France Gélinas:** When you say things like this, the next question will be: What's your time frame for making sure that all 36 have that?

**Ms. Lorelle Taylor:** As of today, as I said, there are 27. Toronto, for example, is one of the public health units that's using it today. We were hoping that by the end of the fiscal year, all public health units would be. I can't absolutely guarantee that 100%. That's our plan. It is somewhat dependent on the capacity of the public health units and staff with all of the other work that they have, because there is some work that they have to do in support of it.

**M<sup>me</sup> France Gélinas:** Am I right in thinking that this would be the tool that you would use to send reminders? Let's put that aside for a sec: Is the health unit presently capable of sending reminders to parents for immunization? Is this tool able to do that as well, where it works?

**Ms. Karen Hay:** Sudbury is live.

**Ms. Lorelle Taylor:** Sudbury is live—

**M<sup>me</sup> France Gélinas:** Yes! I will try it.

**Ms. Lorelle Taylor:** —and we would be more than happy to get the team to do a demonstration for anyone who would like, because it is alive and well and working. And reminders—

**Ms. Karen Hay:** Reminders are part of the road map right now.

**M<sup>me</sup> France Gélinas:** It's part of the road map. Does that mean that it works or it doesn't?

**Ms. Karen Hay:** Not yet.

**M<sup>me</sup> France Gélinas:** Not yet.

**Ms. Lorelle Taylor:** It's not in ICON for parents yet, but it does give the benefit of—I'm a parent who has five different yellow paper cards for one son. In a new world, I would be able to pull up, at any time of day—if it's more convenient for me at 11 p.m. at night, I don't have to go to my public health unit if I want to pull up my yellow card digitally. That work is in progress for the remainder of the health units.

**M<sup>me</sup> France Gélinas:** Do we have a time frame for when the reminders part of this new parents' ICON would work?

**Dr. Bob Bell:** One of the things, in terms of adoption by public health units, is that it's not mandatory, it's not part of our standards; it's optional for each public health



unit. But it's certainly something we think will be a pull by the parents as they hear about it.

**M<sup>me</sup> France Gélinas:** Sounds good.

I'm moving to recommendation 3, which deals with better tracking of immunization coverage rates as needed. I was intrigued by the fact that the auditor told us that the Public Health Agency of Canada has established some coverage targets. We participate in it, but Deputy, you seemed to imply that you will make a decision as to what our targets would be. Could you share with me what could ever lead us to a different target than what the Canadian government has selected?

**Dr. Bob Bell:** Certainly our targets could be higher than what NACI has recommended. Also, it's possible that we could offer different vaccines than are recommended by NACI. I think it's probably that element that Mr. Fraser was talking about, the discussion of herd immunity, that might lead us to think that we want to exceed the targets that are set by the Public Health Agency of Canada.

Is that fair, Roselle? Are there other reasons?

**Ms. Roselle Martino:** Just to add further, the first set of targets, our national targets, were set by the Public Health Agency of Canada in 2005. The auditor did point out to us that Ontario should have targets as well. At that time, there was also a process under way at the national level to revisit the indicators that they established in 2005—Ontario did participate in that process, as you said—they are very similar to what they previously were, and what we're looking at is: How do those make sense in Ontario?

It's not that we're looking to have something different or to be better, as the deputy said; we might want to look at—they look at certain age groups. They look at two-, seven- and 17-year-olds. Would that make sense for Ontario? Those are the kinds of things we're doing versus challenging what they're establishing as goals or targets.

**M<sup>me</sup> France Gélinas:** It makes sense now.

I'm on recommendation 4. Basically, as of September 2017, the Immunization of School Pupils Act has passed. I'm just curious: At the government level, what were the directives given to the health units as to how a patient who needs to take the information session are to be available to them if they are considering not vaccinating their child?

**Ms. Roselle Martino:** We had a number of training and education sessions with health units. The exemptions overall are about 2%. That's further reduced by, in terms of conscientious exemptions—and this is only for conscientious, right? We provided health units with—there's a guide and there are tools, and we have an educational video that is provided to all health units. There's a space for anybody who chooses to get an exemption. They would be able to go to their local health unit and view the video and receive the appropriate education from the public health nurse or public health professional who is providing an education.

1410

**M<sup>me</sup> France Gélinas:** Have you had any feedback on any health units actually using those tools? Did it go

well? Did it not go well? What are the complaints and that kind of stuff?

**Ms. Roselle Martino:** Madame, it just started in September, so I think it's just under way. We haven't heard any formal complaints, but obviously we're working with the health units to monitor very carefully and address those implementation issues as they come up.

**M<sup>me</sup> France Gélinas:** But nothing has been flagged?

**Ms. Roselle Martino:** There has been nothing glaring that has come to my attention and, therefore, it wouldn't have gone to the deputy's attention.

**The Chair (Mr. Ernie Hardeman):** That concludes the 16 minutes for the second round.

**M<sup>me</sup> France Gélinas:** But I'm only at recommendation number 4.

*Laughter.*

**Dr. Bob Bell:** Mr. Chair, if we could, we have a response to Mr. Yurek's question.

**Ms. Roselle Martino:** Sure. Of the 4.6 million doses, 1.3 million doses have gone to pharmacies.

**The Chair (Mr. Ernie Hardeman):** Just a correction here: We'll go 16 minutes in the second round, not 20, and we'll go to Mr. Dong.

Just before we start, I just want to make sure that, if we have questions for somebody from the audience, in order to get that into the record, they must come to the table to give it. Having discussions both forward and backward doesn't work very well for our recordings.

**Dr. Bob Bell:** Thank you, Chair. Apologies.

**The Chair (Mr. Ernie Hardeman):** Thank you very much.

Mr. Dong.

**Mr. Han Dong:** Did you get a chance to answer Mr. Yurek's question? Go ahead and complete—

**Ms. Roselle Martino:** Yes, we did. Thank you very much.

**Mr. Han Dong:** Okay, good.

I have a quick question. In my const office, I've got constituents coming forward and asking me to sign a notary of public to exempt them from getting vaccinations, because that's a requirement for their workplace—sorry, it's not that the exemption is required, but the notary is required for them to continue working in that environment—let's say, a school where everyone is required to get vaccinated.

My question is, what's the procedure before or after the notary?

**Dr. Bob Bell:** I think we'll have to look into that, because I don't think we're aware of that exemption being provided or required.

**Ms. Roselle Martino:** They require an exemption for it. You're talking about an exemption, right?

**Mr. Han Dong:** Well, not exemption—they're excused from the requirement to get vaccinated due to religious reasons or whatever—

**Ms. Roselle Martino:** Right. There are two ways in which that's granted. There's an exemption. The notary does sign an exemption. If you're getting a medical exemption, with the new amendments—and I know this



is not for ISPA, but there's a medical exemption—we ask the physicians to be clear on what the reason for the exemption is—whether you have a specific medical condition that prevents you from having that—and also that they have educated you on the risks or benefits of that and have been clear on that. It's the same for conscientious.

**Mr. Han Dong:** There is an educational session that they have to go through, right?

**Ms. Roselle Martino:** That is for immunizations that are in the Immunization of School Pupils Act in our vaccine schedule. What we have also encouraged for adults is that, if there is going to be an exemption, they are aware of the—and this part of the local health units, right? We are trying to make them aware of the risks and benefits and provide education, so that if you are going to go and ask for an exemption, you understand what the risks and benefits are of you doing that as an adult.

**Mr. Han Dong:** In the school setting, if a parent doesn't want the kids to go through with getting vaccinated, they will have to go through that education process. But what about staff members, employees of that school? If they don't want to get vaccinated, do they also have to go through an education process?

**Ms. Roselle Martino:** No, that's not mandated in Ontario to do that.

**Mr. Han Dong:** Okay, that's good to know. I'm good, thank you.

**Mr. John Fraser:** So I—

**Mr. Han Dong:** The Chair has to recognize you.

**Mr. John Fraser:** Oh, sorry.

**The Chair (Mr. Ernie Hardeman):** Mr. Fraser.

**Mr. John Fraser:** Sorry, Mr. Chair. Thank you very much.

Just to follow up on my colleague's comment with regard to the app: It's CANImmunize.ca, so France, you can get on your phone right now.

**M<sup>me</sup> France Gélinas:** I'm trying it.

**Mr. John Fraser:** You're trying it right now? I've got it on my phone. Is that the app that's used—

**Ms. Lorelle Taylor:** Sorry.

**Mr. John Fraser:** Can you talk a bit about it?

**Ms. Lorelle Taylor:** Yes, I'd be happy to. CANImmunize is an app that was developed by Dr. Kumanan Wilson, funded by the Public Health Agency of Canada. We have worked extremely closely with CANImmunize. We anticipate supporting CANImmunize app access to the repository because it has functionality, some of which Madame Gélinas was asking about with respect to the forecaster embedded in it. Over time—and I'll probably be asked when that would be so I'll have to check back—but ultimately we are very supportive of app development, in this case through Ottawa and Dr. Wilson, with the right security requirements etc. having access to that repository. We look forward to that.

Today, it doesn't have access. The data is stored on the mobile device. If you enter it, it's on the device; it's not connected yet to the Ontario repository.

**Mr. John Fraser:** Okay, and that's what you're working towards: making sure that that portal is open.

**Ms. Lorelle Taylor:** Yes. His team has been working with us now for probably 12 months.

**Mr. John Fraser:** Is that the Children's Hospital of Eastern Ontario or is that BORN? Are they connected, or is he working with them too?

**Ms. Lorelle Taylor:** I think that there is some work being done by Dr. Wilson with BORN, but CANImmunize is separate and distinct from that.

**Dr. Bob Bell:** My sense is that what he wants to do—and Kumanan has been working on this for some time; he's a very bright internist at the Ottawa Hospital—is that he wants to have all patients in the BORN database registered in an immunization database, with subsequent information entered when they get their immunizations.

**Mr. John Fraser:** Yes, that's why I wanted to raise it. I'm just looking at the app right now; I've heard about it before.

BORN Ontario is one of these things that's sort of under a bushel basket. It's a really incredible piece of data collection. Every newborn—and continuing to follow them as we go along, eventually ensuring that these things are connected together, so we can determine what kind of outcomes we're getting out of the measures that we're taking in the health care system. You don't hear about it very often, but it's really quite incredible, the stuff that they're doing.

**Dr. Bob Bell:** If I may, the connection of that database with other databases—for example, the database related to educational performance: The integration gives us opportunities for understanding things like if a child had jaundice at birth that we didn't think was that severe, but then a group of children with jaundice at birth end up having, in a blinded study, lower educational outcomes, these kinds of linkage of databases could provide you with information about causal relationships that you didn't expect.

**The Chair (Mr. Ernie Hardeman):** Ms. Taylor, you want to make a comment?

**Ms. Lorelle Taylor:** Yes. I was just thinking that it may be a question that I actually posed myself with respect to the timeline for CANImmunize. Our team has confirmed that we have plans for summer 2018 to have CANImmunize connected to the Digital Health Immunization Repository. Those plans are in progress as we speak.

**Mr. John Fraser:** That's great. The other question I had, and it may be a bit early to get this, but do we have any indications of the kind of uptake that we're getting with CANImmunize? Have any public health units said, "I've got 2,000 people on it," or 1,000? The adoption rate is what I'm getting at.

**Ms. Lorelle Taylor:** Yes. I can get that for you. I don't want to cite a number. If I had to guess right now, I think it is over the 200,000 mark now, but we will find that out for you and provide an answer.

**Mr. John Fraser:** That's pretty significant. The next question will be: Once you're connected, how do you get



it to that critical mass where there's a tipping point where adoption gains its own momentum? How does it get to that number?

1420

**Dr. Bob Bell:** You know what? That macro level of the work that Lorelle's team is leading with making digital information available with appropriate privacy protection and authentication of identity: Two app developers for this kind of work—we have a variety of sandboxes available for developers where we would provide de-identified information that they can use to develop apps like CANImmunize.

Was that developed in a sandbox environment, that we provided them with data?

**Ms. Lorelle Taylor:** Yes, we have and will continue to enable CANImmunize to work with test data in our test environment. Secondly, we've done two things. In March 2015 we took the immunization data, created completely anonymous test data and did a hackathon where we got all of the bright minds from the universities to see what apps they would recommend, because eventually we see that there are different apps that may want access to that repository. So it was a test bed of innovation, if you will. We do have—I'll use Bob's language for this—the sandbox, that the innovators can access as they're developing their apps—test data only.

**Mr. John Fraser:** It's interesting as well, too, because you think it's something as simple as those yellow cards. I don't know how many we've lost but we have three kids, so probably in the double digits. I don't want to sound irresponsible; they all got vaccinated, but then when you went looking for it, it's like, "Where did I stick that little yellow card?"

**Dr. Bob Bell:** Every year, it's a panic at the start of school, right?

**Mr. John Fraser:** It's the panic, yes.

How much time do I have, Chair?

**The Chair (Mr. Ernie Hardeman):** You have about, oh, six minutes left.

**Mr. John Fraser:** Okay. The other interesting thing about the app is that I know that there are the Immunity Warriors, which looks like it's information for kids. But the kids aren't going to be working the phones, so I'm sure there's an opportunity to educate—other public education to these users in terms of health and that kind of information, so that's good.

**Dr. Bob Bell:** Yes, that sort of behavioural approach to how you get people to understand self-management and how you get people to take care of their own health.

The other pitch I put in for Lorelle's program is the support of a variety of different self-management tools that start to build algorithms with artificial intelligence as to how you make them progress in terms of helping people manage their own health with vaccination or the management of congestive heart failure or COPD.

The information we're developing in a provincial repository—immunization is one, and other clinical data—lab data, others. The open approach, with appropriate privacy protection and authentication of identity:

These are real opportunities for us to make the health system more responsive and more cost-effective, as you know—opportunities that the Digital Health Strategy is making available.

The approach we're taking is that we don't need to do it all. We're not the appropriate people to do it. But we do need to ensure that people's privacy is protected, and make repository information available to developers.

**Mr. John Fraser:** Yes. Have the people—the innovators—the people who have the ideas and are looking at it from a different point of view, go out there and look at it from the consumer end, right?

**Ms. Lorelle Taylor:** Yes.

**Mr. John Fraser:** Thank you very much. I appreciate it. I don't know if any of my colleagues—

**The Chair (Mr. Ernie Hardeman):** Anything further? If not, we'll go to the official opposition: Mr. Walker.

**Mr. Bill Walker:** Thank you very much, Mr. Chair. How are you?

**Dr. Bob Bell:** Mr. Walker, good to see you.

**Mr. Bill Walker:** Good to see you as well.

**Dr. Bob Bell:** Thank you for being here today.

**Mr. Bill Walker:** This isn't estimates, I'm told, so I have to be kind of—

**Mr. Jeff Yurek:** I brought in the heavy hitter.

**Mr. Bill Walker:** Darn it; I was keen, too.

**Dr. Bob Bell:** We were having withdrawal until we got to come into the room today.

**Mr. Bill Walker:** Well, we can fix that for you. We can give you a vaccination very quickly.

Could you tell me, please, what information has been gathered from public health units about vaccine wastage in physicians' offices, and the cause?

**Dr. Bob Bell:** Do you want to start that, Roselle?

**Ms. Roselle Martino:** Yes, definitely. I'm just trying to find my notes here.

**Dr. Bob Bell:** I'll start off by saying that that is a process and evolution of the inventory management that, through Panorama, has helped dramatically in that regard. We enter a lot of information in the inventory management process and Roselle will talk about it.

**Ms. Roselle Martino:** The vaccine—our cold chain inspection process is quite unique in Canada. In addition to the inventory module that the deputy mentioned, we also do ask health units to report on vaccine wastage, so we have a sense of what's happening. The threshold from WHO says it should not exceed 5%, and we are hovering around that—probably up at 6% or 7%—and we continue to and we continue to make efforts to ensure wastage is reduced as much as possible.

**Mr. Bill Walker:** Thank you very much. Specific to physicians' offices for measles, mumps and rubella, can you give me any kind of an indicator regarding wastage in those three areas?

**Ms. Roselle Martino:** Yes. The wastage rate for—so, again, your question is a good one because the wastage does vary on the vaccine, which is probably why you're asking. For MMR it's below 10%. For HPV it's about



5%, and rubella—again, it's MMR, so one vaccine—so it's less than 10%.

**Mr. Bill Walker:** Great. Thank you. Can you share with me how many unannounced inspections would have occurred since May 2016?

**Ms. Roselle Martino:** Of the fridges?

**Mr. Bill Walker:** To physicians' offices or the health units, just to again get a sense—because we want to make sure that it's a very robust system and that people aren't gaming the system, if you will.

**Ms. Roselle Martino:** I have to check with the team about how many were unannounced. That's not the process of the program, the inspection program around vaccine handling and storage. There is a regular inspection procedure for all of our partners that are involved in immunization delivery programs, the publicly funded program. It's not so much around unannounced, but rather ensuring that they are complying with the vaccine handling and storage protocol, and if they are not, scheduling those follow-up visits and ensuring that they are in compliance.

**Dr. Bob Bell:** Mr. Walker, just to add that this is a risk-adjusted protocol, and we would conduct an unannounced inspection and not contact the premises in advance if it has previously been non-compliant with storage and handling requirements. I'll just ask the team: Do we know how many times we have done that?

**Ms. Roselle Martino:** No; that's why—what I was going to say is, that is a new requirement. That is not in place yet. That will come into effect with the new standards in January 2018. But it was something that was raised by the auditor in terms of looking at risk-based approaches, and so this is one of the things—if there's a premises that's high-risk, then we have put in the requirement that the health unit can go in and do an unannounced inspection.

**Mr. Bill Walker:** Can you just remind me again what the actual process is if someone was found to be in non-compliance?

**Ms. Roselle Martino:** Obviously the first one is the education component of it. Then we do also have the right to not provide the vaccine. We can limit them from being part of our publicly funded program. They may not be able to participate.

**Mr. Bill Walker:** And it's a general practice that your inspector, when they go in, would be more like a coach in helping them get through compliance, or are they more, "This is what you did wrong and just fix it"?

**Ms. Roselle Martino:** I think the approach we try to take generally is more education, because we want to ensure as many delivery partners as we can to immunize. We want to have a breadth of that.

**Dr. Bob Bell:** I might mention as well that the storage requirements are not terribly onerous: You have to have a thermometer in your fridge and you have to be demonstrating that the temperature is appropriate. It's not something that we expect will be problematic.

**Mr. Bill Walker:** Thank you. Has the ministry obtained evidence on the efficacy of the influenza

vaccine in reducing the transmission of influenza from hospital staff to hospitalized patients?

**Dr. Bob Bell:** I can start off with that. There is good evidence in the long-term-care community that immunization of staff is important in preventing transmission within the residential community. When you've got staff who are interacting on a daily basis with long-term-care residents, there's good evidence in the literature that immunization is important to protect the health of residents, or using a mask, if immunization is not chosen.

1430

In the acute care community, it's fair to say that there is not the same kind of data, partly because, of course, in acute care, people are frequently leaving rapidly after scheduled care, and the data just doesn't exist that immunization or using a mask is an effective way of protecting acute care patients in hospitals.

**Mr. Bill Walker:** Can you just give me an idea, an overview, of the steps taken by the ministry to prevent and control hospital-acquired influenza? What are your best practices?

**Dr. Bob Bell:** One of the things that really is best practice in terms of infection prevention and control in hospitals is, of course, hand washing. It's the basis for years of how you prevent transmission of a variety of infections, from *Clostridium difficile* to influenza.

If you go into an Ontario hospital today, you see alcohol rinse present everywhere, from the entry to the hospital to the entry to a unit, to every door, plus every bed has an alcohol dispenser present. It has been demonstrated that protection against influenza is as good with alcohol rinse for the hands as washing your hands. That's one of the indicators hospitals use in quality improvement protocols that are required by the government under the Excellent Care for All Act, and it's one of the most commonly monitored. Hospitals have monitors on the floor who secretly survey staff and look at compliance with hand hygiene—the three moments of hand hygiene. Of all the ways of protecting against influenza, that probably is the most effective.

**Mr. Bill Walker:** I think the ministry has indicated it would conduct further analysis of the reasonableness of pharmacists' fees and compare the reasonableness of billing data for 2015-16 by March 2017. Could you just share with me what information you have collected regarding the relative costs of different health care providers administering the flu vaccine and the reasonableness of the rate paid to pharmacists to administer the influenza vaccine?

**Dr. Bob Bell:** Pharmacists are paid about \$5—

**Ms. Roselle Martino:** No, it's \$7.

**Dr. Bob Bell:** —\$7.50, and physicians are paid about \$10 if that's the only service being rendered. We feel that's appropriate. We have terrific uptake by pharmacies of the opportunity to provide immunization: 1.2 million doses of the 4.3 million doses provided to the province are provided to pharmacies, so we think there's good uptake. We understand that pharmacists are responding to this funding opportunity with good performance.



**Mr. Bill Walker:** I had an inquiry just the other day from a stakeholder, asking about you cancelling a program that protected the frail and elderly by providing all those 65 and older in long-term care with an enhanced seasonal flu vaccine called Fluad, and that the long-term-care residents will only receive the regular vaccine used by healthy adults. Can you share whether that's true and if it's actually going to be the case?

**Ms. Roselle Martino:** No. Every year, the ministry will review its product mix depending on the circulating flu strains and the epidemiological evidence we're getting. We changed the product mix to ensure that we had more enhanced strains of vaccines available. Based on the evidence, the main thing for the long-term-care homes was to ensure that they had the vaccine early, which we do, and that the vaccines that they were getting are protective for them. Again, it's just a different product mix that's based on the circulating strain.

**Mr. Bill Walker:** So just for clarity, then: Will Fluad be available, or it won't be available?

**Ms. Roselle Martino:** Not for next year, we don't believe it will be available. We have to, again, keep revisiting the mix. It changes every year, so we will keep revisiting it.

**Mr. Bill Walker:** Sure. And, just again, a point of clarification: When you say "next year," you mean the fall of 2018, spring of 2019?

**Ms. Roselle Martino:** Correct.

**Mr. Bill Walker:** Thank you. If a public health unit nurse or a pharmacist administers a vaccine associated with an adverse event following immunization, are they entered into Public Health Ontario's database of adverse events?

**Ms. Roselle Martino:** Health units are required to collect that, and what we've done, with new amendments to the Health Protection and Promotion Act, is that any adverse event for any immunization that is in the immunization schedule must be reported to the local medical officer of health.

**Mr. Bill Walker:** Okay, great. Mr. Chair, how much time?

**The Chair (Mr. Ernie Hardeman):** You have about five minutes left.

**Mr. Bill Walker:** I'm filling in. I have to go over some of the notes that I don't know whether he covered yet, so I hope I don't ask you anything that has already been asked.

**Dr. Bob Bell:** We'd be delighted to answer again, Mr. Walker.

**Mr. Bill Walker:** I'm sure you would.

Has there been any cost-benefit analysis of the effectiveness of bonus payments to physicians?

**Dr. Bob Bell:** I can talk about this to some length. There are a variety of incentive payments that we provide to physicians related to the immunization of school-aged children, relevant to today's conversation, and relevant to the immunization of adults against influenza; also, for appropriate cancer screening. The Auditor General has looked at this extensively with the review of rostered, comprehensive primary care funding modalities.

What we've seen is that certain models of physician compensation do result in better preventative approaches, better responses to preventative measures being followed by the physicians. However, those physicians in those models of compensation were undertaking those same approaches to preventative health before they entered into those models, so it's likely that there's probably no causal relationship between the incentive payments being provided and the outcomes being achieved. It's probably that doctors moved into those models were already doing preventative measures.

Of course, the way we provide funding to any physician for any service is a matter of negotiation with the Ontario Medical Association, and, as you know, those negotiations are under way currently.

**Mr. Bill Walker:** Okay. There may be time for a quick one: Is the ministry still on track to publicly report immunization rates by school by March 2019?

**Dr. Bob Bell:** Months or years?

**Ms. Roselle Martino:** We continue to keep that as our target. We aim to do that.

**Mr. Bill Walker:** And do you have a target date for immunization rates by daycare facility?

**Ms. Roselle Martino:** That would be after the schools. We don't have a target date, but we're continuing to track for that as well.

**Mr. Bill Walker:** To be a little tougher, can you tell me why you don't have a date?

**Ms. Roselle Martino:** Because the first time that we had released it by health unit, by Public Health Ontario, was 2017, just this year, and then they have to get the data for schools and then we're going to be looking at different sample size, taking into consideration small communities' daycares where there are very few children. It would be easy to identify who they are. We really need to put a privacy lens on that, as well, and ensure that we have the integrity of the data. It's not that we're trying to not do it; it's just ensuring that what we produce is protected and that it is solid data, as well.

**Mr. Bill Walker:** I would never infer that you're not trying to do it, but I will continue to challenge you as I do the long-term-care folks on outcomes. I do believe that if you're not measuring it, if you're not pushing for a deadline, then that can slide and slide, and of course we all get painted with the same brush with the government moving so slow, so I'd like to see that you've got a firm date. We know where the facilities are. I certainly appreciate that you want to do some testing, but I think that you can still put a deadline on that, and then that's our job to hold you to account for those deadlines.

**Ms. Roselle Martino:** For sure. Absolutely. What I would say is that we are looking at and we're working toward schools and daycares in the same vein. It's not like we're just looking at schools and not looking at daycares. It's just a different set of data. If you want to infer from that, we will be tracking toward 2019. But, again, that's our track.

**Dr. Bob Bell:** Emphasize that we are collecting the data for virtually all licensed daycare children today.



**Ms. Roselle Martino:** That's not consistent across the province. In the new standards, that is a new requirement, which is one of the reasons why we hadn't given a date yet.

**Dr. Bob Bell:** I see.

**Mr. Bill Walker:** Similarly, and I don't know if Jeff asked this one, has the ministry taken any steps to establish provincial immunization coverage target rates for all vaccinations?

**Dr. Bob Bell:** We did talk about that, in that the National Advisory Committee on Immunization has established their recommendations for pan-Canadian standards. Not every province has the same immunization protocol—you know, they're not all identical. So we're looking at the pan-Canadian recommendations to determine if they're appropriate for Ontario.

**Mr. Bill Walker:** Great.

**The Chair (Mr. Ernie Hardeman):** Thank you very much for your presentation. That does include the time allotted for the presentation.

**Dr. Bob Bell:** There we go.

**The Chair (Mr. Ernie Hardeman):** We thank you very much for your very good presentation—

**Dr. Bob Bell:** Thank you, Chair. Thank you, members, for your attention.

**The Chair (Mr. Ernie Hardeman):** —and I'm sure it will help us in our deliberations as we move forward with this report.

We'll break for just a few minutes and come back into closed session to decide where we go from here.

*The committee continued in closed session at 1441.*



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